

12/21/04
not under
prior art
11/8/05
12/21/04
4 weeks

11/21/04
4 weeks

09/904953

IN THE CLAIMS:

1. (Currently amended) An isolated nucleic acid encoding a hek-L protein capable of binding hek and affecting the growth and differentiation of cells expressing hek, wherein said nucleic acid comprises a nucleotide sequence that is at least 80% 90% identical to a sequence selected from the group consisting of nucleotides 83-796, 83-745, 140-796, and 140-745 of SEQ ID NO: 1.

2. (Canceled)

3. (Currently amended) An isolated nucleic acid encoding a hek-L protein capable of binding hek and affecting the growth and differentiation of cells expressing hek, wherein said nucleic acid comprises a nucleotide sequence that is at least 80% 90% identical to a sequence selected from the group consisting of nucleotides 28-630, 28-573, 94-630, and 94-573 of SEQ ID NO: 3.

4. (Canceled)

5. (Currently Amended) An isolated nucleic acid encoding a human hek-L protein capable of binding hek and affecting the growth and differentiation of cells expressing hek, wherein said hek-L comprises an amino acid sequence that is at least 80% 90% identical to a sequence selected from the group consisting of amino acids 1-202 and 1-219 of SEQ ID NO: 2 and amino acids 1-160 and 1-179 of SEQ ID NO: 4.

6. (Canceled)

7. (Currently amended) An isolated nucleic acid encoding a fusion protein comprising a hek-L polypeptide that binds hek and affecting the growth and differentiation of cells expressing hek, and an Fc polypeptide, wherein said hek-L comprises an amino acid sequence that is at least 80% 90% identical to a sequence

selected from the group consisting of amino acids 1-202 of SEQ ID NO: 2 and amino acids 1-160 of SEQ ID NO: 4.

8. (Previously presented) An expression vector comprising a nucleic acid according to claim 1.

9. (Previously presented) An expression vector comprising a nucleic acid according to claim 3.

10. (Previously presented) An expression vector comprising a nucleic acid according to claim 5.

11. (Previously presented) An expression vector comprising a nucleic acid according to claim 7.

12. (Original) A process for preparing a hek-L polypeptide, comprising culturing a host cell transformed with a vector according to claim 8 under conditions promoting expression of hek-L, and recovering the hek-L polypeptide from the culture.

13. (Original) A process for preparing a hek-L polypeptide, comprising culturing a host cell transformed with a vector according to claim 9 under conditions promoting expression of hek-L, and recovering the hek-L polypeptide from the culture.

14. (Original) A process for preparing a hek-L polypeptide, comprising culturing a host cell transformed with a vector according to claim 10 under conditions promoting expression of hek-L, and recovering the hek-L polypeptide from the culture.

15. (Original) A process for preparing a hek-L polypeptide, comprising culturing a host cell transformed with a vector according to claim 11 under conditions promoting expression of hek-L, and recovering the hek-L polypeptide from the culture.

Claims 16-27. (Canceled)

28. (Withdrawn) A method for binding hek, comprising contacting a hek polypeptide with a hek ligand (hek-L) polypeptide, wherein said hek-L polypeptide is selected from the group consisting of:

- a) the hek-L protein of SEQ ID NO:2 in mature form;
- b) a fragment of the hek-L protein of SEQ ID NO:2;
- c) the hek-L protein of SEQ ID NO:4 in mature form; and
- d) a fragment of the hek-L protein of SEQ ID NO:4; wherein said fragment binds hek.

29. (Withdrawn) A method according to claims 28, wherein said hek-L polypeptide is a purified soluble fragment of the hek-L protein of SEQ ID NO:2.

30. (Withdrawn) A method according to claim 28, wherein said hek-L polypeptide is a purified soluble fragment of the hek-L protein of SEQ ID NO:4.

31. (Withdrawn) A method according to claim 28, wherein said hek polypeptide, or said hek-L polypeptide, or both, is expressed on a cell.

32. (Withdrawn) A method according to claim 28, wherein said hek-L is in the form of an oligomer comprising at least two of said hek-L polypeptides.

33. (Withdrawn) A method according to claim 28, wherein said hek-L is attached to a diagnostic or therapeutic agent.

34. (Withdrawn) A method for binding elk, comprising contacting an elk polypeptide with a hek-L polypeptide, wherein said hek-L polypeptide is selected from the group consisting of:

- a) the hek-L protein of SEQ ID NO:2 in mature form;
- b) a fragment of the hek-L protein of SEQ ID NO:2;

- c) the hek-L protein of SEQ ID NO:4 in mature form; and
- d) a fragment of the hek-L protein of SEQ ID NO:4; wherein said fragment binds hek.

35. (Withdrawn) A method according to claim 34, wherein said hek-L polypeptide is a purified soluble fragment of the hek-L protein of SEQ ID NO:2.

36. (Withdrawn) A method according to claim 34, wherein said hek-L polypeptide is a purified soluble fragment of the hek-L protein of SEQ ID NO:4.

37. (Withdrawn) A method according to claim 34, wherein said elk polypeptide, or said hek-L polypeptide, or both, is expressed on a cell.

38. (Withdrawn) A method according to claim 34, wherein said hek-L is in the form of an oligomer comprising at least two of said hek-L polypeptides.

39. (Withdrawn) A method according to claim 34, wherein said hek-L is attached to a diagnostic or therapeutic agent.